REMARKS

The final Office Action mailed March 16, 2010 has been received and reviewed. Prior to the present communication, claims 1-24 were pending in the subject application. Claims 1, 4-6, 8, 14, 17-18, and 20-21 have been amended herein. Care has been exercised to introduce no new matter. Claims 1-24 remain pending and are believed to be in condition for allowance. Applicants respectfully request reconsideration of the present application in view of the above amendments and the following remarks.

Rejections based on 35 U.S.C. § 103

A)   Applicable Authority

Title 35 U.S.C. § 103(a) declares, a patent shall not issue when "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." The Supreme Court in *Graham v. John Deere* counseled that an obviousness determination is made by identifying: the scope and content of the prior art; the level of ordinary skill in the prior art; the differences between the claimed invention and prior art references; and secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1 (1966). To support a finding of obviousness, the initial burden is on the Office to apply the framework outlined in *Graham* and to provide some reason—suggestions or motivations—found either in the prior art references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the prior art reference or to combine prior art reference teachings to produce the claimed invention. See *Application of Bergel*, 292 F.2d 955, 956-957 (CCPA 1961).

B)   Obviousness   Rejections   Based   on   "Recognizing   Mathematical Expressions Using Tree Transformations" to Zanibbi et al. (hereinafter, "Zanibbi") and U.S. Patent No. 6,275,791 to Weise (hereinafter, "Weise")

Claims 1-5 and 14-24 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Zanibbi, in view of Weise. Applicants respectfully traverse said rejection for the following reasons.

Independent claim 1 has been amended to require, in part, "providing a mirror data structure to represent a first data structure; supplying input data to a plurality of parser analysis engines via snapshots of the mirror data structure; operating on the snapshots by the plurality of parser analysis engines to form a second data structure," which the prior art of record does not describe. In addition, dependent claim 4 has been amended to require, "determining which potential candidate node to assign … based, at least in part, on a determination of which arrangement of potential candidate nodes will most reduce data rewrite processing operations," which the prior art of record also does not describe. Support for said amendments can be found at ¶¶ [52 and 77] of Applicants' original specification. Thus, amended independent claim 1, as well as dependent claims 2-5 are believed to be allowable over the prior art of record.

Independent claim 14 has been amended to require, in part, "a parser, comprising: one or more mirror data structures of the first data structure received by one or more parser analysis engines, wherein the one or more parser analysis engines operate concurrently with user input to the first data structure," which the prior art of record does not describe. In addition, dependent claim 17 has been amended to require, "determine which potential candidate node to assign … based, at least in part, on assigning more weight to a leaf node which contains additional data or information," which the prior art of record also does not describe. Support for

said amendments can be found at ¶¶ [52 and 78] of Applicants' original specification. Thus, amended independent claim 14, as well as dependent claims 15-17 are believed to be allowable over the prior art of record.

Independent claim 18 has been amended to require, in part, "one or more mirror data structures representing the first data structure and sent to a corresponding one or more parser analysis engines, wherein the one or more parser analysis engines operate on the one or more mirror data structures concurrently with user input to the first data structure," which the prior art of record does not describe. In addition, dependent claim 20 requires, in part, "the first ancestor node and second ancestor node are assigned at least in part, on reusing the first ancestor node or the second ancestor node," which the prior art of record also does not describe. Support for said amendments can be found at ¶¶ [52 and 79] of Applicants' original specification. Thus, amended independent claim 18, as well as dependent claims 19-24 are believed to be allowable over the prior art of record.

Additional support for claim amendments can be found in Applicants' original specification at ¶ [36]. Applicants respectfully request withdrawal of said rejection and allowance of claims 1-5 and 14-24.

C) Obviousness Rejections Based on "Recognizing Mathematical Expressions Using Tree Transformations" to Zanibbi et al. (hereinafter, "Zanibbi"), U.S. Patent No. 6,275,791 to Weise (hereinafter, "Weise"), and U.S. Pub. No. 2003/0130976 to Au (hereinafter, "Au")

Claims 6-13 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Zanibbi and Weise, and in further view of Au. Applicants respectfully traverse said rejection for the following reasons.

Independent claim 6 has been amended to require, in part, "transforming data from a first data structure to a second data structure via one or more intermediate mirror data structures," which the prior art of record does not describe. In addition, dependent claim 8 also requires, in part, "assigning the first ancestor node ... based, at least in part, on a determination of which arrangement of potential candidate nodes will most efficiently reuse the leaf nodes," which the prior art of record also does not describe. Support for said amendments can be found at ¶¶ [52 and 77] of Applicants' original specification. Thus, amended independent claim 6, as well as dependent claims 7-13 are believed to be allowable over the prior art of record. Therefore, Applicants respectfully request withdrawal of said rejection and allowance of claims 6-13.

CONCLUSION

For at least the reasons stated above, claims 1-24 are now believed to be in condition for allowance. Applicants respectfully request withdrawal of the pending rejections and allowance of the claims. If any issues remain that would prevent issuance of this application, the Examiner is urged to contact the undersigned – 202-783-8400 or nberezny@shb.com (such communication via email is herein expressly granted) – to resolve the same.

The fee for a Request for Continued Examination and a Petition for a one month extension of time are electronically submitted herewith. It is believed that no additional fee is due. However, if that belief is in error, the Commissioner is hereby authorized to charge any amount required to Deposit Account No. 19-2112 with reference to Attorney Docket Number 306582.01/MFCP.149540.

Respectfully submitted,

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